AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 3, line 6, as follows:

The foregoing object of the present invention has been achieved by the provision of a

transmission type photoelectric encoder having a telecentric optical system in which a first lens

and an aperture located at a focal position of the first lens are interposed between a main scale

and a photoreceptor, and wherein at least a second lens is interposed between the aperture and

the photoreceptor with a focus of the second lens on the aperture, thereby constituting a bilateral

telecentric optical system.

Please amend the paragraph on page 3, line 19, as follows:

Moreover, at least either one of the first lens and the second lens each of the two lenses is

made of: a spherical ball lens, which has high distortion but is inexpensive; a GRIN lens of

gradient refractive index type (also called SELFOC lens), which refracts light beams in a

parabolic pattern inside its lens medium; or a drum lens. This allows compact configuration at

low price.

Please add the following new paragraphs beginning on page 3, line 19:

The foregoing object of the present invention has also been achieved by the provision of

a photoelectric encoder having a telecentric optical system in which a first lens and an aperture

located at a focal position of the first lens are interposed between a main scale and a

photoreceptor, and wherein one or more second bilateral telecentric optical systems including a

LAW OFFICES OF CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC} 1420 Fifth Avenue second aperture and third and fourth lenses arranged on both sides thereof is/are further

interposed between the second lens and the photoreceptor.

The foregoing object of the present invention has also been achieved by the provision of

a photoelectric encoder having a telecentric optical system in which two lenses and an aperture

located at a focal position of the two lenses are interposed between a main scale and a

photoreceptor, and wherein the two lenses are comprising identical lenses having symmetrical

front and back shape with regard to central plane perpendicular to optical axis.

Please delete the paragraph beginning on page 4, line 1.

Moreover, one or more second bilateral telecentric optical systems including a second

aperture and third and fourth lenses arranged on both sides thereof is/are further interposed

between the second lens and the photoreceptor.

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